

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



14 JAN 2005



(43) International Publication Date
29 January 2004 (29.01.2004)

PCT

(10) International Publication Number
WO 2004/010589 A2

(51) International Patent Classification⁷:

H04B

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(21) International Application Number:

PCT/US2003/022471

(81) **Designated States (national):** AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(22) International Filing Date: 17 July 2003 (17.07.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/396,753

19 July 2002 (19.07.2002) US

(84) **Designated States (regional):** ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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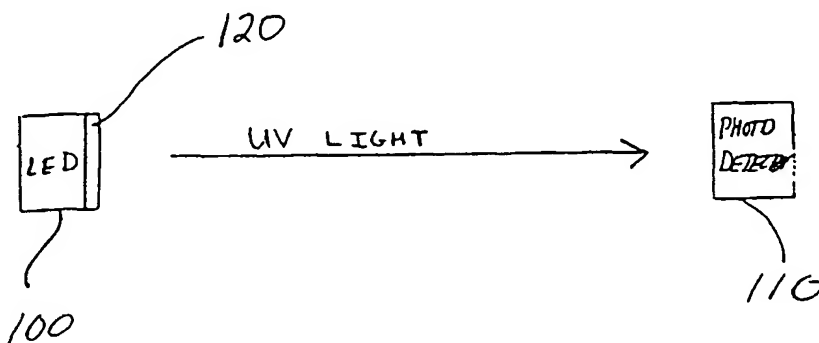
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Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHODS AND APPARATUS FOR COMMUNICATION USING UV LIGHT



(57) Abstract: Communication methods and apparatus using ultraviolet (UV) light are provided. Safe UV communication devices, including remote control units, can use highly efficient UV LEDs and very low-noise UV photodetectors. In some cases, the LEDs emit light at wavelengths below 400 nm, below 320 nm, or even below 280 nm. In one embodiment, communication can be achieved using an LED that emits less than about 1 picowatt of UV energy at a photodetector distance of up to at least about 10 meters. Longer range communication can also be achieved at higher power levels. Photodetectors having very low dark currents at room temperature, such as below about 1×10^{-9} A/m², or even below about 1×10^{-12} A/m², are preferable.

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